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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,328	10/16/2001	Jason Lango	5693P116	4985
48102 7590 01/28/2008 NETWORK APPLIANCE/BLAKELY 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER BILGRAMI, ASGHAR H	
			ART UNIT 2143	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/981,328	Applicant(s) LANGO ET AL.	
	Examiner Asghar Bilgrami	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 11/09/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,8-12 and 16-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8-12 and 16-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 9, 10 & 12 are rejected under 35 USC 101 because the "thread" used in the claim language constitutes to software only and is not shown to be embodied on a tangible medium. Therefore the claims are non-statutory. Applicant is requested to make appropriate changes to the claims in light of the specification to overcome this rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5, 6, 8-12 & 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srikantan et al (U.S. Pub No 2002/005612 A1).
4. As per claims 1, 6, 9, 16, 20 & 22 Srikantan disclosed a method for reducing peak output traffic bursts in a processing system, the method comprising: receiving a

first packet of data representing a particular portion of a media stream, scheduled to be delivered to each of a number of downstream clients at a specified packet delivery time; modifying the specified packet delivery time of the first packet of data (paragraph.26, lines 1-4), for delivery of the first packet of data to a first downstream client system, by adding the first delay value to the specified packet delivery time of the first packet data; pseudo-randomly selecting a second delay value; and modifying the specified packet delivery time of the first packet of data for delivery of the first packet of data to a second downstream client system, by adding the second delay value to the specified packet delivery time of second first packet of data (paragraphs. 53-55). Although Srikantan did not explicitly disclose modifying the media data packet's delivery time for first and second client respectively so that the media data packet from a source reaches the first and second client at slightly different times (page.3, paragraphs.36 & page.4, paragraphs.46 & 53). However Srikantan disclosed the media frames (packets) of a live or pre-recorded event from a single source being simultaneously streamed (multiple streams) in a real-time to multiple users in a specified order within a certain period of time (i.e. time interval T1, T2 etc) {paragraphs. 25 & 26(lines 1-8) & paragraphs 55 & 56}. Therefore in order for the packets of a single live or pre-recorded transmission to be delivered to multiple clients as described by Srikantan time delay techniques are utilized (paragraph, 8 & paragraph, 55 "different timing (time intervals) for different clients"). At the time the invention was made it would have obvious to one in the ordinary skill in the art to understand that the above-disclosed method by Srikantan involves modifying the media data packet's (frame) delivery time belonging to single

media source (live or pre-recorded event) in order to accommodate simultaneous real-time transmission to multiple clients.

5. As per claims 2, 19 , 21 & 23 Srikantan disclosed the method of claim 1 wherein pseudo-randomly selecting the first delay value comprises pseudo-randomly selecting the first delay value from within a specified time range (Page.1, Paragraph.8, page.2, paragraph.26, page.3, paragraphs.36 & page.4, paragraphs.46 & 53).

6. As per claims 3, 11 & 24 Srikantan disclosed the method of claim 10 wherein the first client delay is pseudo-randomly selected from the range: 0 to approximately 500 milliseconds (page.4, paragraph.40, lines 1-10).

7. As per claims 5, 8 & 12 Srikantan disclosed the method of claim 1 further comprising: receiving a data file from the upstream server, the data file including a payload portion of the first streaming media data packet and a payload portion of the second streaming media data packet (page.2, paragraph.30); and storing the data file in a storage within the streaming media cache (page.6, paragraph.75).

8. As per claims 10 & 14 Srikantan disclosed the computer system of claim 9 wherein the second thread is configured to form the first delayed first data packet in response to the first client delay by adding the first client delay to the first delivery time

(Page.1, Paragraph.8, page.2, paragraph.26, page.3, paragraphs.36 & page.4, paragraphs.46 & 53).

9. As per claim 25 & 26 Srikantan disclosed the method of claim 22, wherein said data packet is part of a live data stream being broadcasted to the plurality of client system, wherein a pseudo-randomly selected delay time for first client system of the plurality of client systems is different from the pseudo-randomly selected delay time for a second client system of the plurality of systems. {The packets of a live broadcast cannot reach all the viewers at the same time. Srikantan on paragraphs 26, 55 & 56 (figure 4) discloses serving streams of media which is either live or pre-recorded from one track to multiple clients and further states that the same media is streamed to each client, but with different timing. That is, different client streams may, at any given time, be streaming media from different time indices within the media track. Importantly Srikantan on paragraph 26 also states that the delivery of each frame or other unit of media must be performed in a specified order and with in the certain period of time to maintain Quality of Service at an acceptable level (I.E to avoid congestion as a result of all streams being delivered/transmitted at the same time which the applicant describes as "burst traffic"). Finally in Srikantan disclosure streaming media server delays the real-time streaming multimedia packets of a live or recorded event in a multicast environment (One source to many destinations) so that the quality of service of the multimedia to the users does not drop to an unacceptable level ((page.2, paragraph 26 & page. 4, paragraph. 26 & page. 4, paragraph. 55)).

Response to Arguments

10. Applicant's arguments filed 09/19/2005 have been fully considered but they are not persuasive.

11. Applicant argued that "time index" (or time indices") is completely different from "delay value" Srikantan clearly states in Paragraph [25]"a media streaming server according to a present embodiment of the invention may operate in a "reflection" mode of operation, in which the server receives a media stream from another streaming system or server (usually in the multicast mode), and forwards the media to one or more users (in unicast or multicast mode) and is directed towards determining the segment location. In paragraph [26]Srikantan states "Streaming real -time media places constraints upon the issuing server, because delivery of each frame or the unit of media must be performed in a specified order and within a certain period of time. Thus, despite the number clients it serves, a media streaming server must strive to meet the demands of streaming real-time media so that the Quality of Service to the users does not drop to an unacceptable level." "Time indices" is refereeing to the sequence (metadata) of the packet so that media data (packet) can be inserted into a buffer (for streaming to a client), which is used in conjunction with time in figure 4 Srikantan where Srikantan explains how a single media tack is streamed to multiple clients, but with different timing (paragraphs. 53-55).

12. Applicant argued that Srikantan does not teach or suggest pseudo-randomly selecting a first delay value and adding the first delay value to the delivery time of the first streaming media data packet to form a first modified delivery time for the first media data packet, and pseudo-randomly selecting a second delay value.

13. As to applicant's argument the examiner points out that **the packets of a live or prerecorded broadcast cannot reach all the viewers at the same time because by doing so will create huge traffic bursts and potentially bring down the system/network therefore and they have to be sent out at different times for example, T, T+1, T+2...T+N.** Examiner again points applicant to the rejection on line 3 of this office action. Additionally Srikantan on paragraphs 26, 55 & 56 (figure 4) discloses serving streams of media which is either live or pre-recorded **from one track to multiple clients** and further states that the same media is streamed to each client, **but with different timing.** That is, different client streams may, at any given time, be streaming media from different time indices within the media track. Importantly Srikantan on paragraph 26 also states that the delivery of each frame or other unit of media **must** be performed in a specified order and within the certain period of time to maintain Quality of Service at an acceptable level (I.E to avoid congestion as a result of all streams being delivered/transmitted at the same time which the applicant describes as "burst traffic"). Finally in Srikantan disclosure streaming media server delays the real-time streaming multimedia packets of a **live** or recorded event in a multicast environment (One source to many destinations) so that the quality of service of the

multimedia to the users does not drop to an unacceptable level ((page.2, paragraph 26 & page. 4, paragraph. 26 & page. 4, paragraph. 55). Examiner advises the applicant to either amend the claim by incorporating the details regarding the significance of pseudo-random delay value in light of the disclosed specification to overcome the prior art or file an Appeal Brief if applicant still disagrees with examiner's rejection.

14. Applicant argued that In Srikantan discloses streaming different segments of the media data to different client at any given time and it is dues to the fact that the requests for the media data from the different clients occurred at different times.

As to applicant's arguments it is true that Srikantan discloses streaming segments of the same media (I.E live or pre-recorded event) from one track (see, paragraph.49) to multiple clients at different timings to avoid delivering the media to all the clients at the same time to overcome the congestion/surge or traffic peak bursts scenario. In

paragraph.55 Srikantan states:

[0055] FIG. 4 demonstrates a method of serving streams of media from one track to multiple clients while maintaining only one copy of the media's metadata, according to one embodiment of the invention. In this method, the same media may be streamed to each client, but with different timing. That is, different client streams may, at any given time, be streaming media from different time indices within the media track.

[0049] In this embodiment, Track 302 represents a class of objects configured to assemble metadata for a media track and allow multiple file track handles to use the metadata on behalf of different client streams. Multiple types of Track objects may be generated from Track 302, such as LiveTrack 320 for assembling metadata for streaming live or real-time event media, and FileTrack 322 for assembling metadata for

Additionally, applicant's allegation that that in Srikantan the media requests occurred from different clients at different times is mere assumption.

15. Applicant argued that Srikantan does not require or even suggest, that time delay techniques must be used.

As to applicants argument Srikantan clearly states:

[0053] In this embodiment of the invention, each TrackHandle object derived from TrackHandle 304 includes suitable methods for moving to a certain time index in a media program or track, reading media data into a buffer (for streaming to a client), etc. Thus, TrackHandle objects maintain state information regarding a client's current play position in a media track, and may include one or more buffers for sending media packets to clients and one or more pointers or references to their corresponding Track objects for accessing metadata.

[0054] Once a FileTrack object is established for a given media track, subsequent client requests for that track use the established FileTrack rather than assembling the track's metadata again. Thus, FileTrack objects may be configured to instantiate new FileTrackHandle objects for new client streams.

[0055] FIG. 4 demonstrates a method of serving streams of media from one track to multiple clients while maintaining only one copy of the media's metadata, according to one embodiment of the invention. In this method, the same media may be streamed to each client, but with different timing. That is, different client streams may, at any given time, be streaming media from different time indices within the media track.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


AB


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